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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,205	12/31/2003	Alexander Berger	MSFT-2863/306352.1	9206
41505	7590	12/17/2008		
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER LIE, ANGELA M	
			ART UNIT 2163	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,205	Applicant(s) BERGER ET AL.	
	Examiner ANGELA M. LIE	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/26/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9-17 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,9-17 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of claims

1. Claims 1-4, 9-17 and 20-22 are currently pending.
2. Claims 5-8, 18 and 19 are canceled.
3. Claims 1, 13 and 22 are newly amended.
4. Claims 1-4, 9-17 and 20-22 remain rejected.

Claim Objections

5. Claims 1, 13 and 22 are objected to because of the following informalities:
6. Claims 1, 13 and 22 recite that following steps “persisting both metadata and object data changes of the linked source object in the target datastore such that the metadata and the object data are copied from the source datastore to the target datastore, and persisting neither metadata nor object data in the target datastore such that any change made to the linked source object is propagated to the target datastore”. Furthermore in the same claims, the Applicant also discloses that one of the refreshing policy requires “refreshing the information in the target datastore with every query to the linked source object”. The two steps recited above teach updating both metadata and object data whenever changes to the source datastore occur. Thus the phrases such as “persisting both” or “persisting neither” fail to show distinction between those two options. In other words in either case if the term “propagate” is interpreted as copying, those two steps essentially lead to the same result (i.e. recording changes in target datastore whenever source datastore is updated). Consequently, if there is no apparent

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difference between those two options, they are considered redundant. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-3, 11-17 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US Publication No. 2001/0037228), hereafter referred to as Ito, in view of Faulkner (US Patent No. 6389427).**

With respect to claims 1, 13 and 22, Ito teaches a system and a method comprising the following steps: linking at least one object in the source to an object in the target datastore (paragraph [0045]); specifying a persistent property of the linked source object for controlling how changes to the linked source object are handled by the target datastore (paragraphs [0045] and [0049], wherein data object are first mapped and then can be updated in both source and target databases), the persistence property further comprising one of persisting only metadata in the target datastore such that metadata is copied from the source datastore (Figure 1, elements 100A, 100B or 100C) to the target datastore (Figure 1, elements 103A or 103B) and changes to metadata of the linked source object are not updated in the target datastore until object data

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changes of the linked source object is altered (paragraph [0049], wherein if the data is not updated there is nothing to copy because the metadata is up-to-date), persisting both metadata and object data changes of the linked source object in the target datastore such that the metadata and the object data are copied from the source datastore to the target datastore, and persisting neither metadata nor object data in the target datastore such that any change made to the linked source object is propagated to the target datastore; specifying a refresh policy for refreshing information in the target datastore, the refresh policy comprising one of refreshing the information in the target datastore with every query to the linked source object and refreshing the information in the target datastore at specified time intervals (paragraph [0049]); integrating data from the object in the source datastore to the target; and processing a query to the linked source object by forwarding the query to the object in the source datastore (paragraph [0049], wherein the “event driven update” is caused by an update of metadata considered a query), receiving a response to the query,.

Ito however does not explicitly teach that response to the query is cached in a memory, and then registered in a registry. On the other hand Faulkner teaches a system from file system performance enhancement wherein changes/updates are cached in LRU and also logged (column 23, lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to log the updates as taught by Faulkner, in Ito's synchronization system, because update history contains very useful information which can be used during update error resolution.

As to claim 2, Ito teaches the method further comprising the step of selecting at least one group of measures in the source datastore as the linked source object (paragraphs [0045] and [0053], wherein user can select which object should be mapped, furthermore the user can assign particular measures to the object (metadata)).

As to claims 3, Ito teaches the method wherein the source datastore and the target datastore are analysis databases (paragraph [0050]).

As to claims 11, 12, 14 and 15, Ito teaches the system and the method wherein the linked source object is a dimension and a measure group in the target datastore (paragraph [0014], wherein data in the source database is mapped to dimensions and measures in the metadata, thus the source datastore comprises the sets of data that are dimensions and measures. Furthermore the source database can be linked to destination database (i.e. data being loaded from the source to destination), thus the destination database also comprises data that is stored in form of measures and dimensions and it can be then used for analysis purposes (paragraph [0013])).

As to claims 16 and 17, Ito teaches the system further comprising an analysis module for specifying the dimensions and the measure groups in the source database and the target database to be linked (paragraph [0014], wherein mapping is considered linking, and further wherein metadata can specify data in a source database that should be loaded into destination database).

As to claims 20, Ito teaches the system wherein the source database resides on a first computer and the target database resides on a second computer (paragraph

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[0025], wherein all of the components illustrated in figure 1 (i.e. source database, destination database) can be stored on separate computers).

As to claim 21, Ito teaches the system wherein the source database is associated with first instance of an analysis module and the target database is associated with a second instance of an analysis module (paragraph [0014, wherein both source and destination (i.e. target) databases are part of analysis process (i.e. they are instances)).

9. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Faulkner and further in view of Le (US Publication No. 2005/0076036).** Ito and Faulkner teach all the limitations disclosed in claim 1, however they do not explicitly teach that the source and target datastores are OLAP databases. On the other hand, Le teaches system for updating multidimensional databases, comprising source and target datastores, wherein those datastores are OLAP databases (paragraph 5). It would have been obvious to one of ordinary skill in the art during time the invention was made to use OLAP databases as taught by Le, as modified Ito's source and target datastores, in order to increase the functionality of the system, for instance generating summary of data in the database.

10. **Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Faulkner and further in view of Yahushi et al (US Publication No. 2002/0040401), hereafter referred to as Yahushi.**

Ito teaches all the limitations disclosed in claim 1, however he does not explicitly teach the step of specifying a filter for the target datastore or that this filter limits data

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accessible by the target to data of a specified type. On the other hand Yahushi teaches a data communication system wherein database (i.e. source database) is holding access right information (i.e. filter) indicative of a type of accessible data by the client device (i.e. could be interpreted as target database) (paragraphs [0009] and [0010]). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to establish the filter that would limit a user or destination/target database to accessing only particular type of information as taught by Yahushi, in modified Ito's multi-databases system, in order to improve security of the information stored in source database.

Response to Arguments

11. Applicant's arguments with respect to claims 1-4, 9-17 and 20-22 have been considered but are moot in view of the new grounds of rejection.

Inquiry

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA M. LIE whose telephone number is (571)272-8445. The examiner can normally be reached on M-F.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela M Lie/
Examiner, Art Unit 2163

/don wong/

Supervisory Patent Examiner, Art Unit 2163